

ATTY DOCKET NO.
01311.001006.1APPLICATION NO.
Div. of 09/982,622

APPLICANT

Thomas Johnson et al.

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2817

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,610,554	3/97	Anvari	330	52	
		5,617,061	4/97	Fukuchi	330	151	
		5,621,354	4/97	Mitzlaff	330	52	
		5,694,395	12/97	Myer et al.	370	480	
		5,742,201	4/98	Eisenberg et al.	330	2	
		5,831,478	11/98	Long	330	52	
		5,815,036	9/98	Yoshikawa et al.	330	52	
		4,879,519	11/89	Myer	330	149	
		4,379,994	4/83	Baumann	330	149	
		5,862,459	1/99	Charas	455	144	
		5,644,268	7/97	Hang	330	151	
		5,760,646	6/98	Belcher et al.	330	149	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT
	EP	0675594	10/95	EPO			

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

S. Grant, "A DSP Controlled Adaptive Feedforward Amplifier Linearizer," July, 1996.**S. Grant and J. Cavers, "A DSP Controlled Adaptive Feedforward Amplifier Linearizer," ICUPC 1996.****A. Smith, "A Wideband Adaptive Feedforward Amplifier Lineariser," August 1997.****A. Smith and J. Cavers, "A Wideband Architecture For Adaptive Feedforward Linearization," May 18, 1998.**

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		5,307,022	4/94	Tattersall, Jr. et al.	330	52	
		5,532,642	7/96	Takai	330	15	
		5,789,976	8/98	Ghannouchi et al.	330	52	
		5,565,814	10/96	Fukuchi	330	52	
		5,485,120	1/96	Anvari	330	151	
		5,489,875	2/96	Cavers	330	151	
		6,208,207	3/01	Cavers	330	149	
		6,166,601	12/00	Shalom et al.	330	151	
		5,157,345	10/92	Kennington et al.	330	149	
		5,130,663	7/92	Tattersall, Jr.	330	52	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT
	JP	58-175309	10/14/83	JAPAN			

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	F. Amoroso, "Spectral Containment By PreDistortion of OQPSK Signal," October, 1998.
	J. Cavers, "Adaption Behavior of a Feedforward Amplifier Linearizer," February, 1995.
	Q. Cheng, et al., "A 1.9 GHZ Adaptive Feedforward Power Amplifier, November, 1998.
	J.C. Lagarias, et al. Convergence Properties of the Nedler-Mead Simplex Algorithm in Low Dimensions, SAIM J. Optim. May, 1997
	P.B. Kennington and D.W. Bennett, Linear Distortion Correction using Feed-forward System, IEEE Trasnactions on Vehicular Technology Vol 45 No 1 (Feb. 1996)
	J. Chen, et al., Adaptive joint lineraisation / equilisation with delay alignments for a wideband power amplifier, March, 1998

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		5,867,065	2/99	Leyendecker	330	149	
		6,414,546	07/02	Cavers	330	149	
		5,898,339	4/99	Maruyama et al.	330	151	
		6,075,411	6/00	Briffa et al.	330	149	
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
		J.T. Chen, H.S. Tsai and Y.K. Chen, Fast Adaptive Wide-band Power Amplifier Feed-forward Linearizer, IEEE Vehicular Technology conference, Ottawa, (1998)					
		J.K. Cavers, Convergence Behavior of an Adaptive Feed-forward Linearizer, IEEE Vehicular Technology Conference, (1994).					
		F.T. Luk and S. Qiao, Analysis of a Recursive Least-squares Signal Processing Algorithm, Society for Industrial and Applied Mathematics, Vol 10, No. 3, (May 1989)					
		S. Ljung and L. Ljung, Error Propagation Properties of Recursive Least-squares Adaptation Algorithms, Automatica, Vol. 21, No. 2 (1985)					
		E. Eweda and O. Macchi, Convergence of the RLS and LMS Adaptive Filters, IEEE Transactions on Circuits and Systems, Vol. CAS-34, No. 7, (July 1987)					
		D.H. Shi and F. Kozin, On Almost Sure Convergence of Adaptive Algorithms, IEEE Transactions on Automatic Control, Vol. AC-31, No. 5, (May 1986)					
		L.L. Horowitz and K.D. Seene, Performance Advantage of Complex LMS for Controlling Narrow-band Adaptive Arrays, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-29, No. 3, (June 1981)					
		G.A. Clark, S.K. Mitra, and S.R. Parker, Block Implementation of Adaptive Digital Filters, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-29, No. 3, (June 1981)					
		A. Feuer, Performance Analysis of the Block Least Mean Square Algorithm, IEEE Transactions on Circuits and Systems, Vol. CAS-32, No. 9, (July 1985)					
		S.S. Narayan, A.M. Peterson, M.J. Narasimha, Transform Domain LMS Algorithm, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-31, No. 3, (June 1983)					
		G.A. Clark, S.R. Parker, and S.K. Mitra, A Unified Approach to Time- and Frequency- Domain Realization of FIR Adaptive Digital Filters, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-31, No. 5, (October 1983)					
		G. Panda, B. Mulgrew, C.F.N. Cowan, and P.M. Grant, A Self-Orthogonalizing Efficient Block Adaptive Filter, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-34, No. 6, (December 1986)					
EXAMINER			DATE CONSIDERED				

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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
		J.Chao, H. Perez, and S. Tsujii, A Fast Adaptive Filter Algorithm Using Eigenvalue Reciprocals as Stepsizes, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-38, No. 8, (August 1990)					
		S.J. Elliot and B. Fafaely, Rapid Frequency-Domain Adaptation of Causal FIR Filters, IEEE Signal Processing Letters, Vol. 4, No.12, (December 1997)					
		R.M. Gray, On the Asymptotic Eigenvalue Distribution of Toeplitz Matrices, IEEE Transactions on Information Theory, Vol. IT-18, No.6, (November 1972)					
		M. Johansson and L. Sundstrom, Linearization of RF Multicarrier Amplifiers using Cartesian Feedback, Electronic Letters, Vol. 30, No. 14, (July 7, 1994)					
		Han et al., "Design and Characterization of a Microwave Feed-Forward Amplifier With Improved Wide-Band Distortion Cancellation", IEEE Transactions on Microwave Theory and Techniques, Vol. 49, Issue 1, Jan. 2001, pp.200-203.					
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